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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/501,092	01/25/2005	Katsuya Itoh	042564	3054
38834 7590 01/16/2008 WESTERMAN, HATTORI, DANIELS & ADRIAN, LLP 1250 CONNECTICUT AVENUE, NW SUITE 700 WASHINGTON, DC 20036			EXAMINER TOSCANO, ALICIA	
			ART UNIT 1796	PAPER NUMBER
			MAIL DATE 01/16/2008	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/501,092

Applicant(s)

ITOH ET AL.

Examiner

Alicia M. Toscano

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 19 December 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-6 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-6 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/ are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 102

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

1. Claims 1-6 are rejected under 35 U.S.C. 102(b) as being anticipated by Majima (WO 01/092417 as evidenced by US 6780482, which is used as an Equivalent English document).

This rejection is as set forth in the action dated 11/28/06, recopied below for convenience.

Majima discloses polyester films for metal sheet laminating. Said films comprise 80-40 wt% polybutylene terephthalate and 20-60 wt% polyethylene terephthalate (abstract).

Regarding the requirement of the half value width of the recrystallization peak: Applicants specification (pg 10-12) discloses the half value width to be a function of the processing technique. Specifically, when only one extruder is used, a higher melt blending temperature and higher blending time is necessary, thus causing the PET and PBT undergo transesterification. The resulting films have a half value width greater than 0.25 (see comparative examples). When PET and PBT are first initially melted in separate extruders/containers and further melt-mixed together, the melt mixing can take

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place in a short time frame, decreasing the transesterification of the product. Films from said process have a half value width less than 0.25 (see examples). Applicants have clearly shown this to be the case in their specification and Examples. As such, Examiner first notes that the composition requirements have been met by Majima. Further, Majima discloses using the same process of applicants, where the individual components are separately melted in different extruders prior to blending and extruding (Column 8 Lines 61-64 and Column 10 Lines 33-37). Majima prefers this method in order to control the ester exchange reaction (Column 8 Lines 63-64). As the processing conditions are met, Examiner finds the half value width of the recrystallization peak to be inherent in Majima, thus meeting all the limitations of Claims 1 and 2.

Claim 3 requires a peak temperature of recrystallization of not less than 180C, which is obtained from heating the film and then cooling at a rate of 25C/min (see applicants specification pg 21 lines 20 – pg 22 line 2). Majima discloses a heat-up crystallization peak (T_c) obtained by heating the film and cooling at a rate of 100C/min (Column 16 Lines 17-28). The recrystallization temperatures of Majima and Applicant are not comparable. It is the Examiners position that since Majima has the same polymers, processed in the same manner, that the peak temperature of recrystallization is inherent.

The reduced viscosity is 0.75 or higher (abstract), see Table 2 which discloses numerous examples (ex 2, 3, 4, 6, 8, and 10-12) in which the intrinsic viscosity of the stretched film is higher than 0.80, as required for Claim 4. Said film is used for

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laminating a metal sheet (title) and form processing (Column 12 Lines 21-27), as required for Claims 5 and 6.

Conclusion

Response to Arguments

2. Applicant's arguments filed 12/19/07 have been fully considered but they are not persuasive. Applicant submitted a declaration 12/19/07. In light of the declaration Applicant argues that the half value of crystallization is not met by Majima. Further, Applicant argues that in light of the Examples shown in the declaration, the Examples in the Specification and the Specification itself that *"the film having a half value width of not more than 0.22 of amended claim 1 can be produced only by separately melting polyester A (PET and polyester (B) (PBT, PTT, or PEN) in different extruders, introducing the melted polyester A and polyester B into an extruder having a small compression ratio, and suitably controlling the resin temperature and extruder temperature"*.

3. Examiner disagrees. Regarding the declaration, Applicant firstly refers to Inventive Example 12, wherein prior to amendment Applicant contends that the composition of Example 12 met the requirements of Claim 1. This is not a true statement. Example 12 of Applicant's invention is drawn to the use of one extruder and a low compression ratio. The resulting half value of 0.39 (see Table 2) does not meet the half value of claim 1, now, or prior to, the amendment since claim 1 required a half

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value of less than 0.25 (originally) and 0.22 (currently). Further, in light of the Examiners previous remarks wherein Majima discloses the use of separate extruders, Applicant has exemplified the use of only 1 extruder, presumably since this is what is exemplified in the Examples of Majima, however, the disclosure of Majima cannot be limited to the Examples. The use of 2 separate extruders is taught by Majima as previously set forth and thusly drawing comparisons to the use of only 1 extruder is inappropriate. As such, the finding that the half value of Majima is greater than that of Claim 1 is not persuasive since it is the position of the Examiner than when Majima uses 2 extruders the half value would be met. The declaration does not properly compare Majima to the invention and is thusly not deemed persuasive, nor can any viable conclusions be drawn from said declaration.

4. Further regarding Applicant's statement that *"the film having a half value width of not more than 0.22 of amended claim 1 can be produced only by separately melting polyester A (PET and polyester (B) (PBT, PTT, or PEN) in different extruders, introducing the melted polyester A and polyester B into an extruder having a small compression ratio, and suitably controlling the resin temperature and extruder temperature"*; whilst the Examiner agrees that the use of 2 separate extruders is required (and met by Majima), Applicant has not sufficiently shown what temperature or compression ratio variations are required, nor has the Applicant shown that specific temperature or compression ratios **are** required. The Examiner set forth the position that *"the criticality of the L/D, compression ratio and the L/D of the compression ratio are moot because Applicants have not shown how said ratios affect the half value property.*

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Applicant has not disclosed any Examples in Applicants Specification to back up said argument. Examiner notes that while Examples 1 and 3 have different compression ratios, the resin temperature is different. As such the Examiner cannot determine the affect the compression ratio has on the half value. Even if the temperature was the same, the Examiner has no way of knowing what the critical range is of said ratios."

5. Applicant has not submitted any further evidence, other than the broad teachings of the specification and the examples which were already available to the Examiner, as to the criticality of the stated variables. Further, though the Applicant states that "suitably controlling the resin temperature and extruder temperature" is required, said temperatures seem to depend on the compression ratio and the polymers themselves, wherein one would be required to use different operating temperatures and compression ratios for different polymer blends, since the blends would inherently have different melting temperature/viscosities. It is thusly still unclear why, since Majima meets the process and compositional elements (and also discloses the inclusion of phosphorous compounds, which are exemplified by Applicant as a seemingly key component) the half value is not inherent in Majima.

6. Examiner requests data to the contrary and the rejection thusly stands.

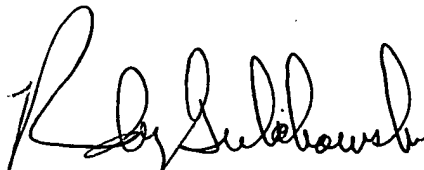
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Alicia M. Toscano whose telephone number is 571-272-2451. The examiner can normally be reached on Monday to Friday 8:30 AM to 5 PM.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Randy Gulakowski can be reached on 571-272-1302. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

AMT



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